my i-limb™ App: Quick Reference Guide for i-limb™ quantum

touch bionics

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Welcome and important points

Welcome to the mobile world of Touch Bionics! The my i-limb™ mobile application will enable you to to quickly and easily change the features of your i-limb™ quantum prosthesis while on the move.

Important points to note:

- The my i-limb mobile app must be downloaded from the Apple® App store.
- A Wi-Fi or cellular connection is needed to download the app, receive updates, or run a hand health check.
- Your Apple device connects to your i-limb quantum via a Bluetooth® connection, which is automatically established when you start the my i-limb app.
- The my i-limb mobile app is compatible with the following devices: iPhone® (4s or newer), iPad® (4th generation or newer), iPad® mini, iPod® Touch (5 or newer).
- To exit the application at any time, simply press the main “Home” button on the front of your Apple device.

Getting started

For general instructions on using your Apple device, read your devices respective user manual provided by Apple.

The first time you use your device, you will need to be connected to the Internet via cellular or Wi-Fi connection. You can connect to a Wi-Fi network by tapping on the “Settings” icon on the first screen.

Next, go to the App Store via the icon. Tap on it to start the app. To search for the my i-limb app, type “Touch Bionics” or “my i-limb” in the search tab and download the app to your Apple device. Note: an Apple ID will be required to download the app. If you do not have one, please create an account by logging on to the Apple website or using your Apple device. For additional information on creating your Apple ID, please reference the product literature supplied by Apple.

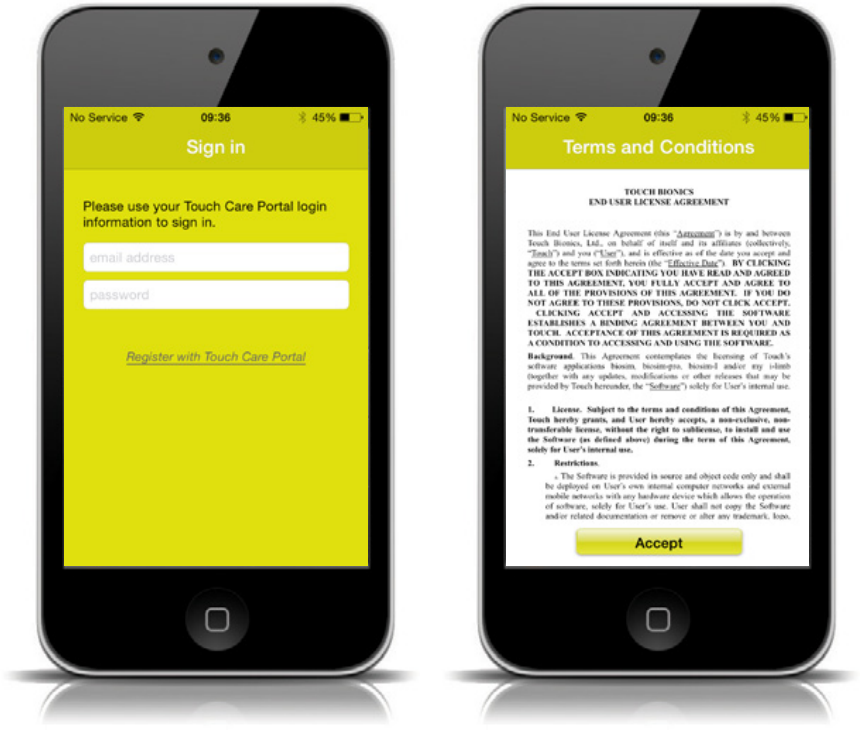
Note: Search for “my i-limb” under iPhone apps.

Upon downloading the my i-limb mobile app, an icon will appear on your mobile device‘s screen. Tap on it to start the app.

Note: Touch Bionics recommends using the latest Apple iOS for best performance. If you are using an older version of iOS, you may receive a one-time notice. Tap “Continue” to acknowledge.

Activation

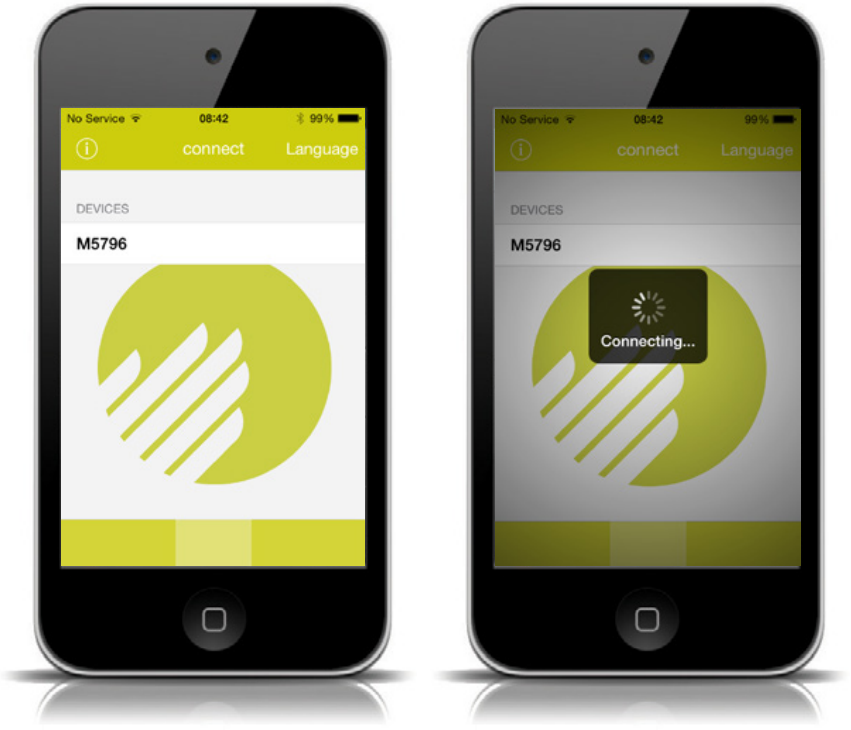
The first time you connect to my i-limb, you will see the “Sign in” screen. Here you will need to enter the email address and password that you use when you log-in on the Patient Care Pathway on Touch Bionics’ web site. If you need to create an account, you may also do so by selecting “Register” on the screen below.



You will need to activate your account by confirming the email sent to the email account you provided prior to being able to connect. Upon registering, please review the Terms and Conditions. Tap “Accept” to continue.

Connection

After signing in, you will be brought to the connection screen where you will tap your device to connect.



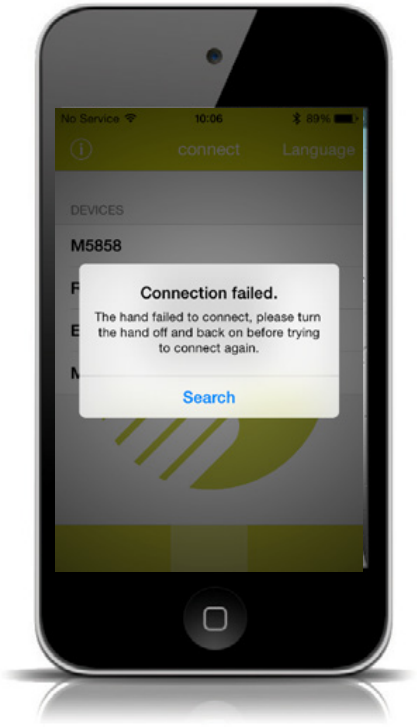
Authorized user access

In order for someone else to gain access to your device you will need to tell them your 5 digit security code. This unique code can be found in the “About” section of the my i-limb app discussed later. They will be prompted to enter this after selecting your device.

In order for a clinician to access your device you will need to tell them your 4 digit serial number located on the wrist plate on the thumb side. They will be prompted to enter this after selecting your device. For extra small hands, rotate the thumb and look inside, from the side of the hand, to view 4 digit serial number.

Connection failed

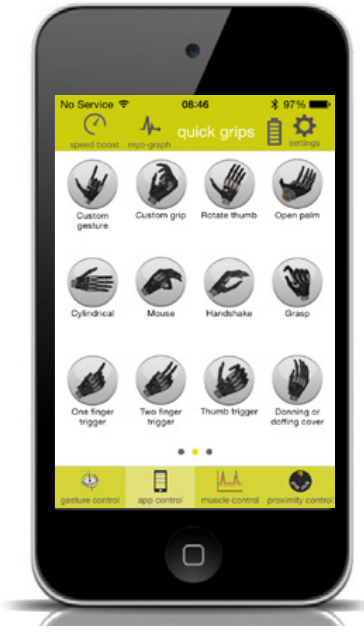
If the hand should fail to connect to the app due to loss of power, proximity with the Apple device, or other reasons, the following screen will appear:



As you power on/off the device wait 4 seconds before tapping search button

App Control: Quick grips and my grips screen

After connecting to my i-limb, you will see the “Quick grips”. Swipe to view “**my grips**” screens. Here you get instant access to 24 quick grip patterns and 12 **my grips** with a single tap. Tapping a grip icon immediately puts the device into that mode.



Note: To exit that grip, simply tap the same icon or use one of your programmed triggers.

gesture control

Using Touch Bionics patented and ground-breaking i-mo™ technology, you have the ability to change grips with a simple gesture. Using your open and close signals, you can activate gesture control by the following steps:

1. While not in a grip, osition i-limb quantum at a 90* angle (as shown below)

2. Give a hold open signal

3. Once index digit twitches, simply move the i-limb quantum forward, back, left or right to access a grip

4. Exit the grip by giving a hold open signal to return to full hand

Note:

- When exiting a grip you will notice the index digit will twitch. If you exit a grip while positioning the i-limb quantum at 90*, this will allow you will be able to immediately gesture into another grip.

- For proper positioning, the hand should be palm up, palm down or palm side (thumb up).

Changing gesture control grips

To change gesture control grips, tap the gesture control icon on the bottom navigation bar.

On the following screen you will see the 4 grips currently allocated. Simply tap the grip you would like to change, then tap the grip you would like to replace it with.

Tapping the gesture control icon will bring you back to the gesture control screen where you grip changes should be reflected.

Changing gesture control trigger

Gesture control can be accessed by either a “Hold Open” signal or a “Co-contraction”. Please note that once this trigger is allocated for gesture control, you will no longer be able to assign it to other grip patterns.

Tapping the hand in the middle of the gesture control screen will allow you to change between “Hold Open” and “Co-Contraction”. Simply select the trigger that you would like to assign to gesture control.

Speed boost

You also have the ability to adjust the speed of i-limb quantum to make it 30% faster. To accomplish this, tap the “speed boost” icon in the top menu bar

The screen will display a slider bar that will allow you to adjust the speed of i-limb quantum to a desired level. Adjusting the slider to the left will decrease the speed while adjusting it to the right will increase it.

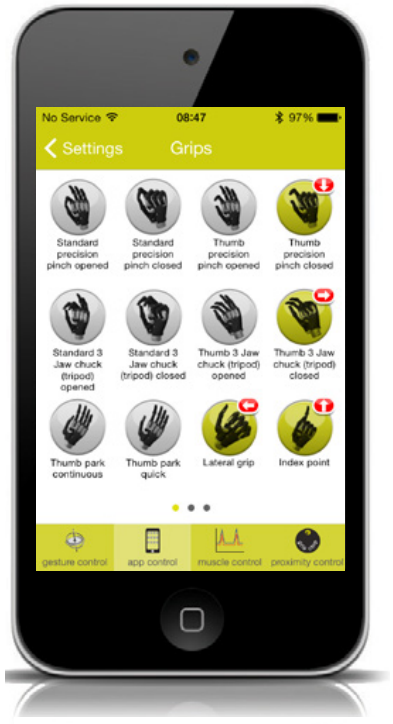
my grips configuration

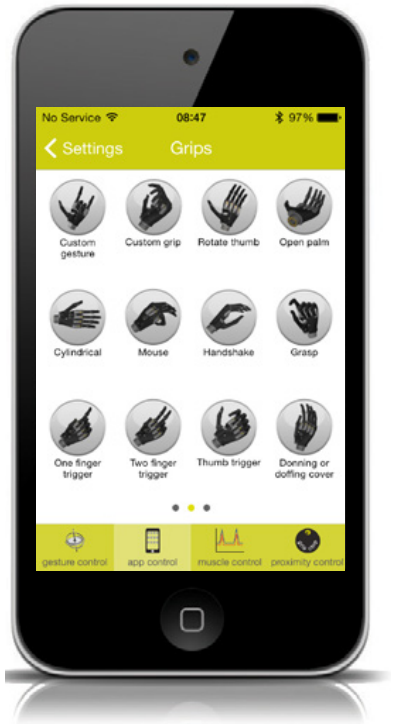
my grips allows you to configure up to 12 additional custom grips and can be used with any trigger or grip chips.

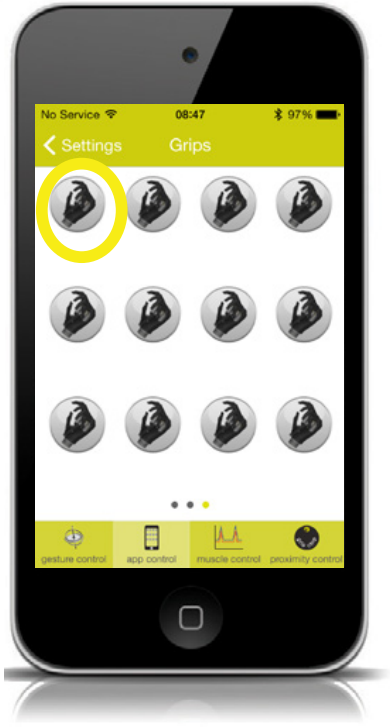
To configure **my grips**, tap the settings icon after connecting to the my i-limb app.

Once on the settings screen tap “Grips” to access the full set of standard grips & **my grips** available for selection.

All unassigned **my grips** will have no name specified until one is assigned by the user.

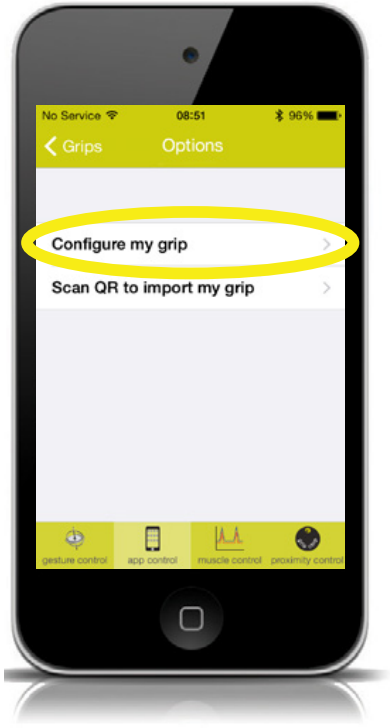






Tap one of the blank **my grip** options to begin creating a custom **my grip**.

Tapping on the desired **my grip** will bring up the **my grip** configuration page that allows you to configure a **my grip** and assign a desired trigger. Tap “Configure **my grip**” to continue.



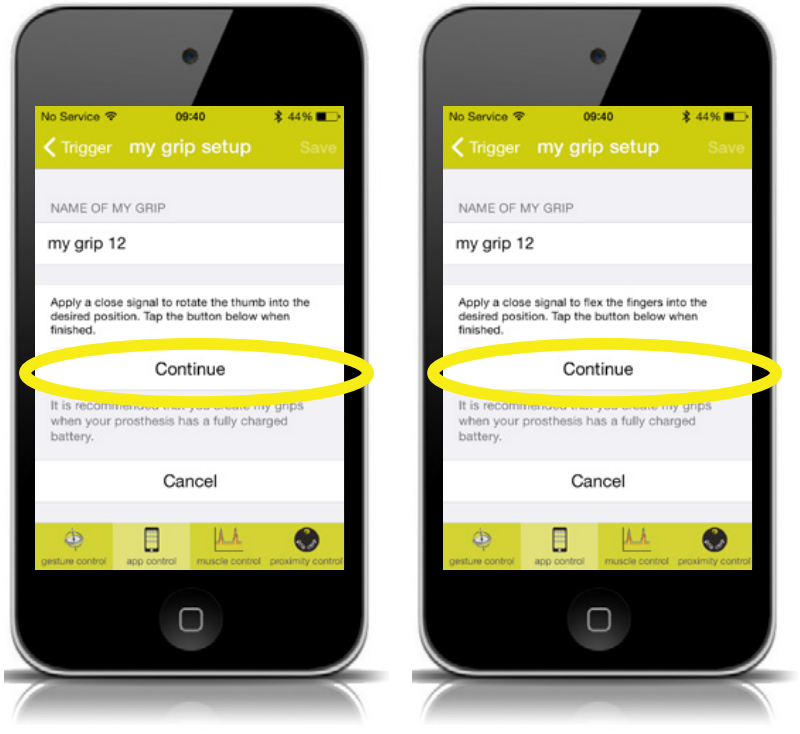
Next you will be able to assign a name to a **my grip**. Tapping the “enter name” field will allow you to customize the name of your **my grip**.

No Service 09:38 44%
Trigger my grip setup Save
NAME OF MY GRIP
enter name
Tap the button below to begin configuring the grip.
Start
It is recommended that you create my grips when your prosthesis has a fully charged battery.
gesture control app control muscle control proximity control
No Service 09:38 44%
Trigger my grip setup Save
NAME OF MY GRIP
my grip 12
Tap the button below to begin configuring the grip.
Start
FINGER POSITIONS
No Service 09:39 44%
Trigger my grip setup Save
NAME OF MY GRIP
my grip 12
Opening hand...
Start
It is recommended that you create my grips when your prosthesis has a fully charged battery.

After creating a name, tap the start button to begin the **my grip** configuration process. This will fully open the hand.

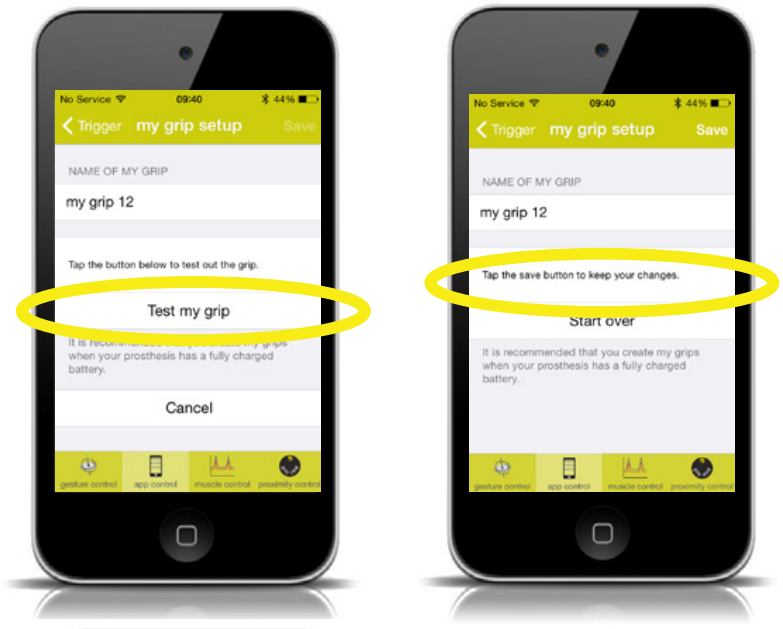
Note: It is recommended that users configure **my grips** when the prosthesis has a fully charged battery.

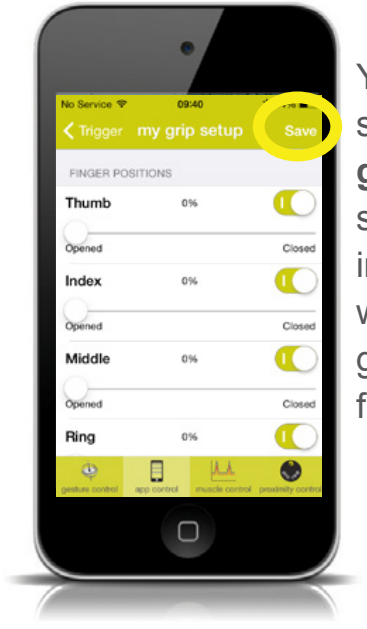
Next, apply a close signal to rotate the thumb to a desired position as noted. Tap “Continue” when finished.


No Service 09:40 44%
Trigger my grip setup Save
NAME OF MY GRIP
my grip 12
Apply a close signal to rotate the thumb into the desired position. Tap the button below when finished.
Continue
It is recommended that you create my grips when your prosthesis has a fully charged battery.
Cancel
gesture control app control muscle control proximity control
No Service 09:40 44%
Trigger my grip setup Save
NAME OF MY GRIP
my grip 12
Apply a close signal to flex the fingers into the desired position. Tap the button below when finished.
Continue
It is recommended that you create my grips when your prosthesis has a fully charged battery.
Cancel
gesture control app control muscle control proximity control

Now apply a close signal to flex the fingers into the desired position as noted. Tap “Continue” when finished.

Tap the “Test **my grip**” button to test the grip. To change the configuration of your **my grip**, tap the “Start Over” button.


No Service 09:40 44%
Trigger my grip setup Save
NAME OF MY GRIP
my grip 12
Tap the button below to test out the grip.
Test my grip
Cancel
It is recommended that you create my grips when your prosthesis has a fully charged battery.
gesture control app control muscle control proximity control
No Service 09:40 44%
Trigger my grip setup Save
NAME OF MY GRIP
my grip 12
Tap the save button to keep your changes.
Start over
It is recommended that you create my grips when your prosthesis has a fully charged battery.



You may also use the digit sliders to fine-tune your **my grip**. Please note that digit sliders will not appear after initial configuration. You will have to exit your my-grip and access again to fine-tune using digit sliders.

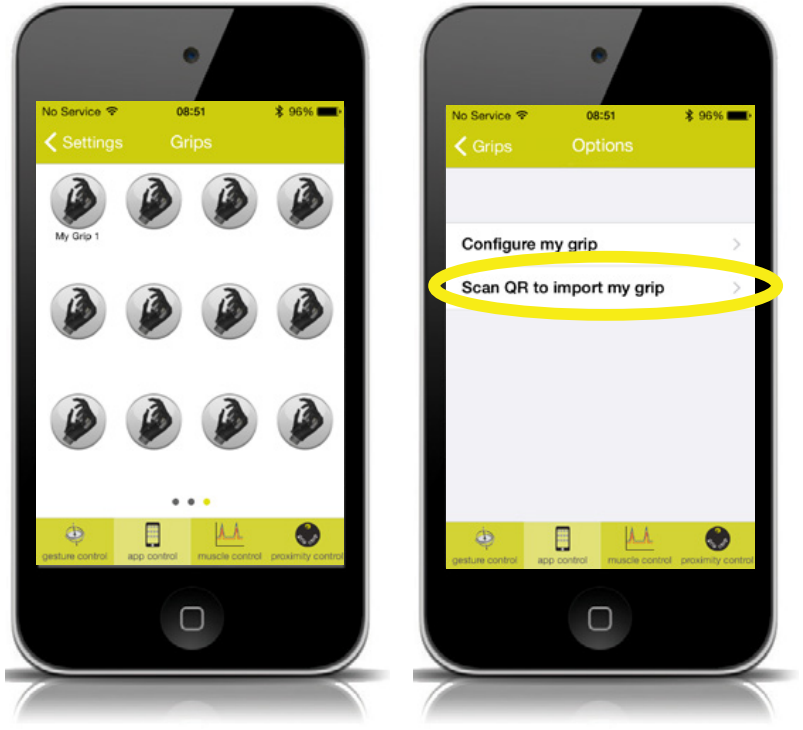
To save the **my grip** configuration, tap “Save.”

Configuring my grips using QR codes

Users are able to instantly program a custom pre-configured **my grip** by scanning quick response (QR) codes provided by Touch Bionics.

Further information and a free QR code library can be accessed online at www.touchbionics.com/qrcodes.

When ready to download and program a **my grip**, tap an unassigned **my grip** to access the “Options” menu.



Once on the “Options” menu, tap the “Scan QR to import **my grip”** option.

After tapping “Scan QR to import **my grip**” the camera function will be activated.

Note: if you have a cover on your mobile device ensure it is not covering the camera lens.

Point your mobile device camera at the desired QR code.

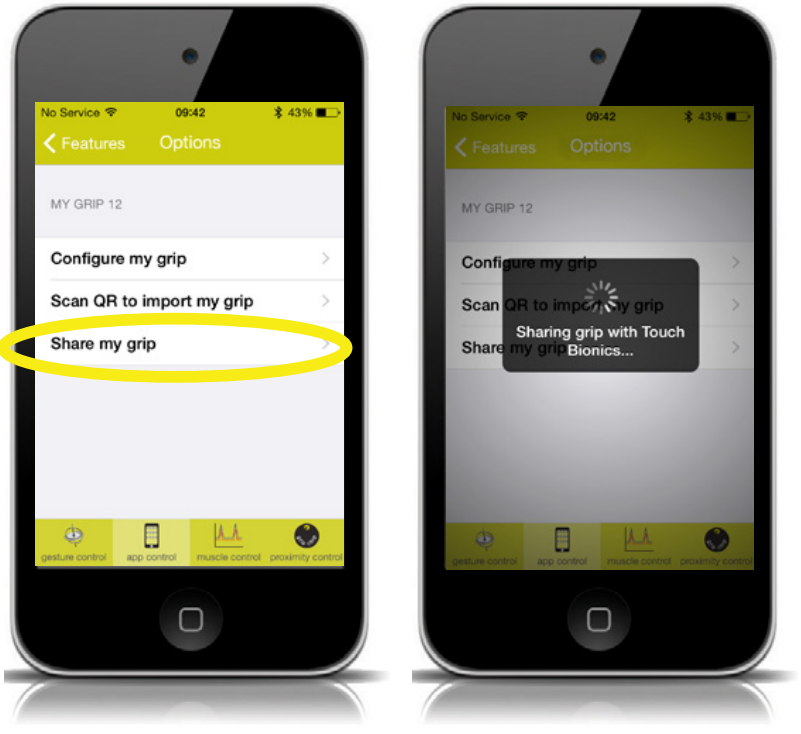
Once the QR code is scanned successfully, the “captured **my grip**” message will appear and you will be brought back to the “Options” menu. From here you can further customize any **my grip** as preferred.

Sharing my grips with Touch Bionics

Users may share custom **my grips** to be considered for inclusion in Touch Bionics‘ QR code library.

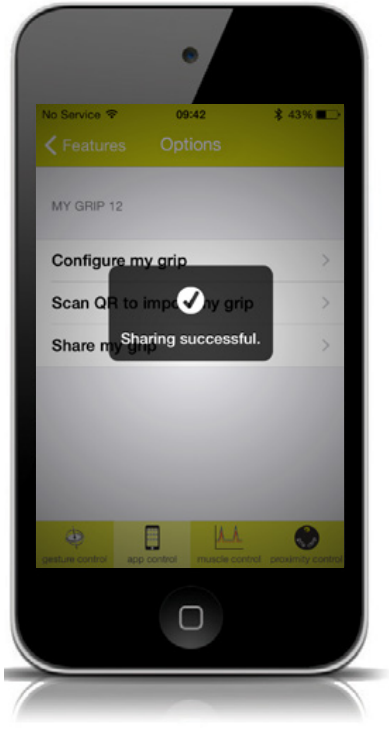
To share your **my grip** with Touch Bionics, tap a **my grip** to access the “Options” menu.

Next, tap “Share **my grip**”. The custom **my grip** will be transmitted to Touch Bionics’ app cloud.



Note: Internet connection is needed to share **my grips**.

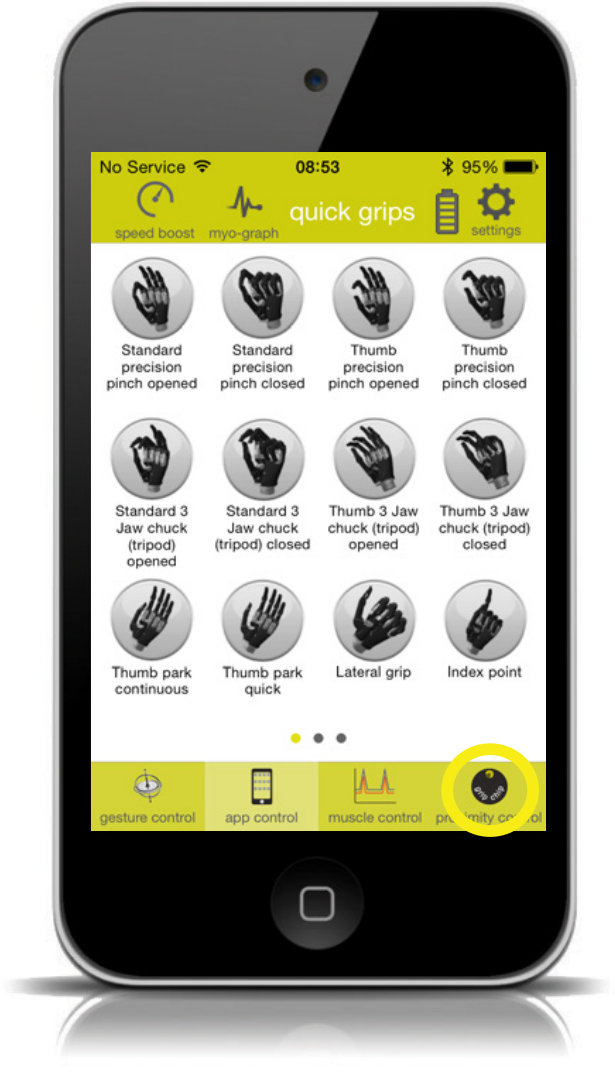
Once complete a message will appear confirming that the **my grip** was successfully shared with Touch Bionics.



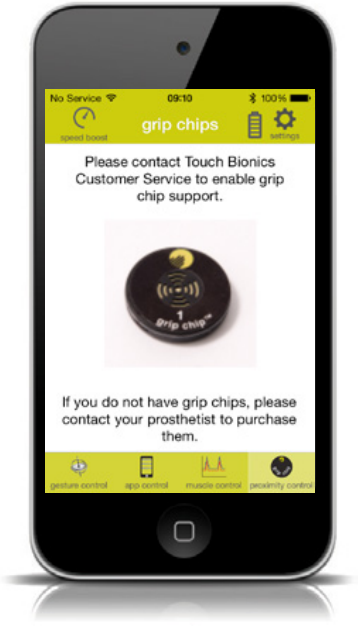
Note: Ensure you have the latest version of iOS installed on your mobile device. QR code functionality is not compatible with iOS versions 6.0 or earlier.

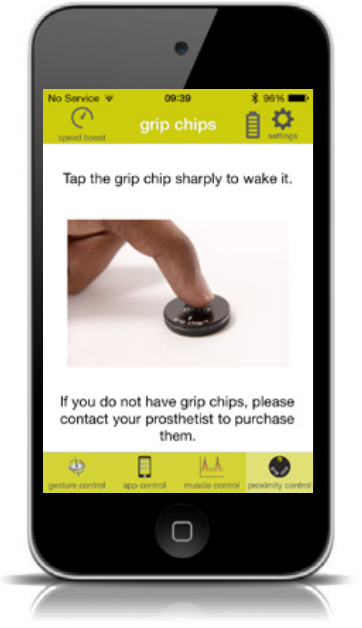
grip chip setup

Upon connection to the my i-limb app, tap the proximity control icon.



You will be prompted to contact Touch Bionics if you do not currently have grip chip capability. For grip chip compatible devices, you will be prompted to awaken the grip chip by tapping sharply as seen on the image to the right. Tap the grip chip until you hear an audible alert.


grip chips
Please contact Touch Bionics Customer Service to enable grip chip support.
If you do not have grip chips, please contact your prosthetist to purchase them.

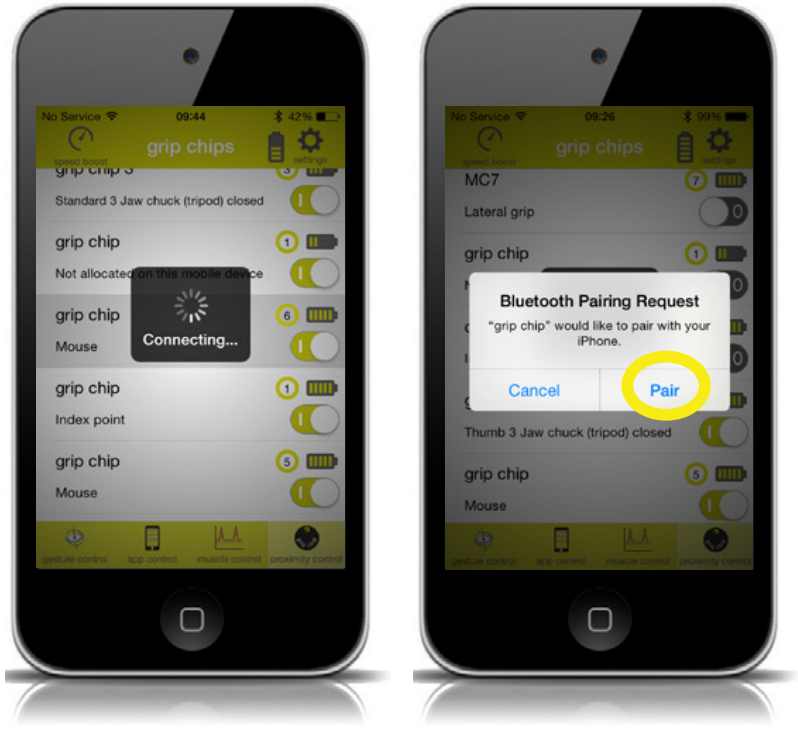

grip chips
Tap the grip chip sharply to wake it.
If you do not have grip chips, please contact your prosthetist to purchase them.

If you have previously activated grip chips, you will be brought to the grip chip home screen.

Active grip chips will be displayed on the grip chip setup page along with their grip chip number and battery level. Tap the desired grip chip to which you want to connect.

Note: You will see “Not allocated on this device” if you attempt to connect to a grip chip that has been previously programed with a favorite using a different Apple device than the one you are currently using. In this case, you can still re-configure the chip, but will not see how it was previously configured.

You will then be prompted to pair to the grip chip. Tap “Pair” to continue.



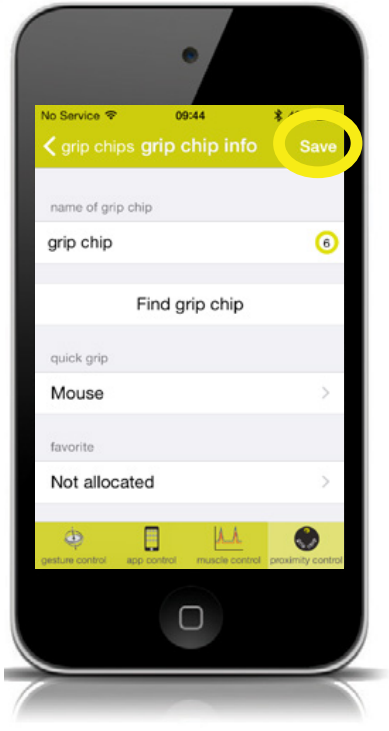
Once connected successfully, the following screen will appear.

To rename the grip chip, tap the “name of grip chip” field.

Tapping “Find grip chip” will cause the selected grip chip to illuminate and make a sound. This allows easy confirmation of which grip chip is connected.

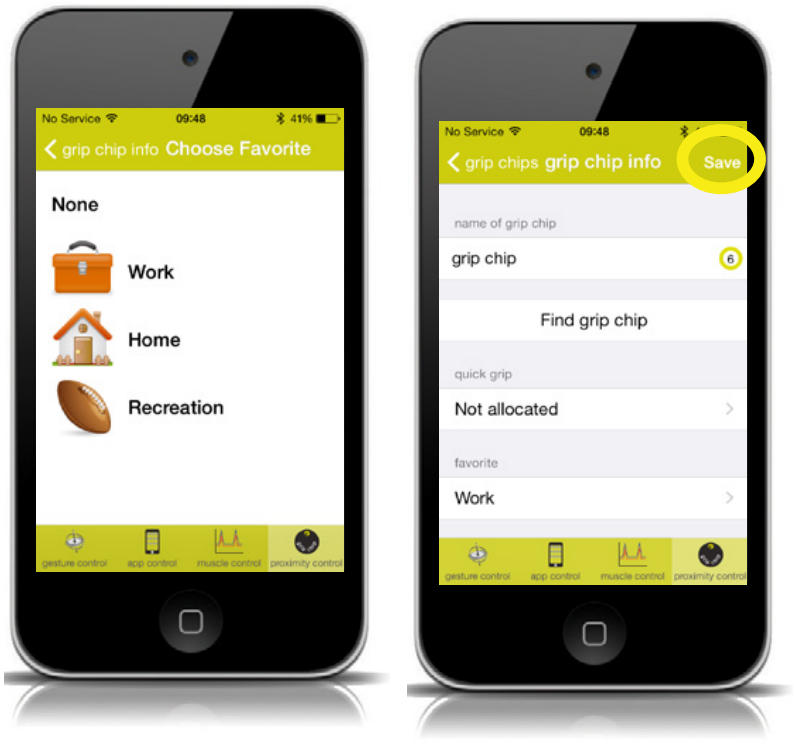
Tap on one of the options to assign quick grip, favorite or **my grip** to a grip chip.

Selecting “Quick grip” will allow you to select a quick grip option to assign to the grip chip.



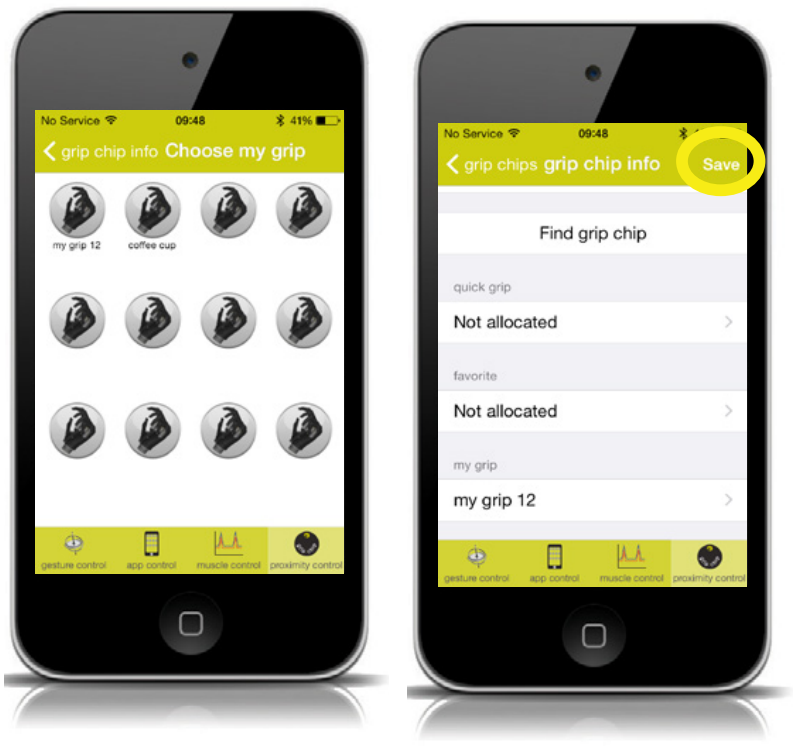
After selecting a quick grip to assign, tap “Save” when arriving back to the “grip chip info“ screen. The grip chip is now shown with its name, assignment, number and battery level.

Selecting “Favorite” will allow you to select a saved favorite option to the designated grip chip.



After selecting a favorite to assign, tap “Save” when arriving back to the “grip chip info“ screen. The grip chip is now shown with its name, assignment, number and battery level.

Selecting “**my grip**” will allow you to select a **my grip** option to assign to the grip chip.



After selecting a **my grip** to assign, tap “Save” when arriving back to the “grip chip info“ screen. The grip chip is now shown with its name, assignment, number and battery level.

You can reassign a grip or favorite and rename the grip chip if desired at any time by repeating this same process.

You also have the ability to deactivate a single grip chip or all grip chips. Upon accessing the grip chip setup, a toggle switch will appear on the top row which allows you to enable/disable all grip chips. A toggle switch will also appear next to each individual grip chip allowing you to enable/ disable it. Disabling a grip chip will not erase any pre-programmed settings.

Note: “Low battery warning” will appear any time the app is running and a chip within range is at or below 10% on battery. Please change the battery according to instructions provided.

You must disconnect from the hand prior to using grip chips. Upon successful programming of grip chips the hand will disconnect automatically.

Helpful Tips:

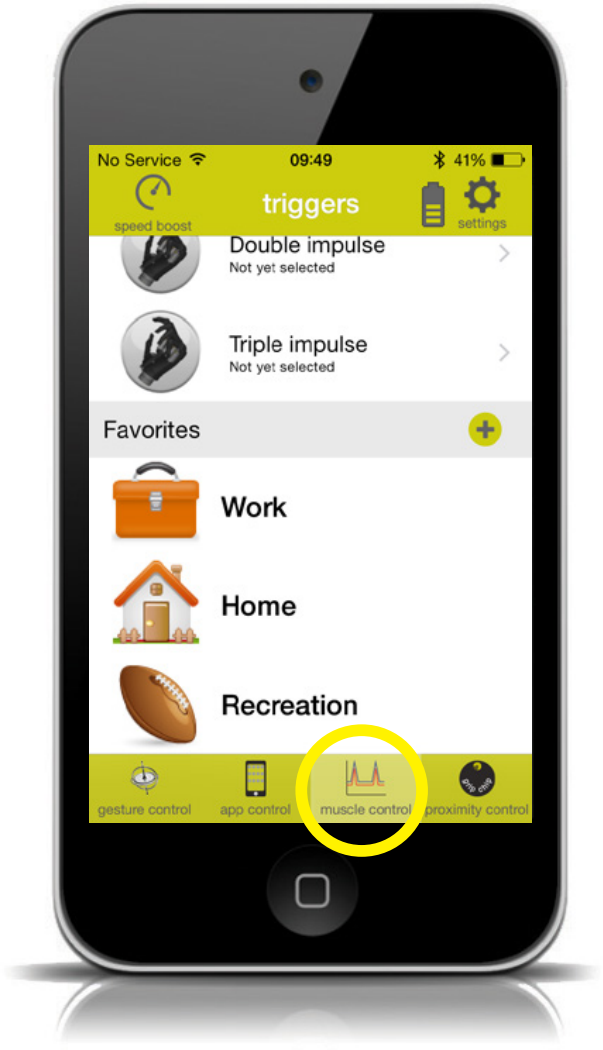
- When powering on hand, please wait 5 seconds before connecting to my i-limb.
- Programing must be completed within 10 seconds or grip chip will return to sleep mode. If grip chip returns to sleep mode, tap it once again to “wake up” and proceed with programming. Once programed, sleep mode is disabled.
- Once programmed the grip chip will remain on until the battery life runs out.
- You must naturally approach the grip chip and hold the i-limb quantum within 6 inches (15cm) from the grip chip. The hand must be in the full open position to detect the grip chip. It is important to remember that a natural movement is critical to quick and proper grip chip detection. Running to a chip or hastily placing your hand near it may result in a connection delay.
- Only hold open for grip chip detection when you are within 6 inches (15cm) of grip chip.

Helpful Tips:

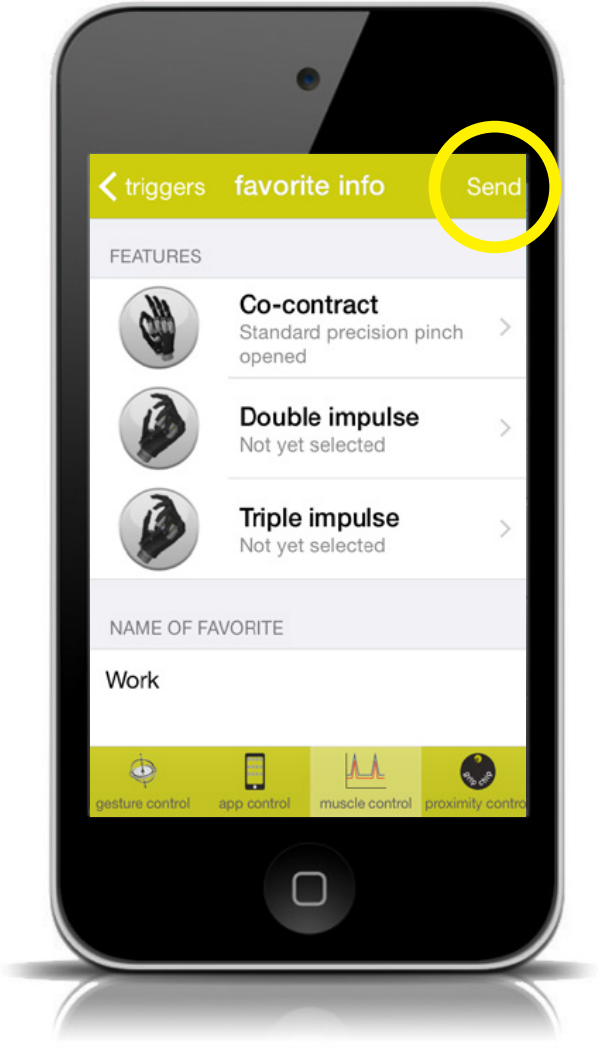
- Each grip chip should remain at least 24 inches (61cm) apart from one another.
- Do not press the home button while hand is in process of connecting to the app. Doing so will inhibit hands ability to detect grip chips. If you press home button during this process, cycle power to the hand or attempt to full reconnect, and then disconnect, from the app to reset connection.

Favorites screen

To access the “Favorites” screen at any time, simply tap the “muscle control” icon.



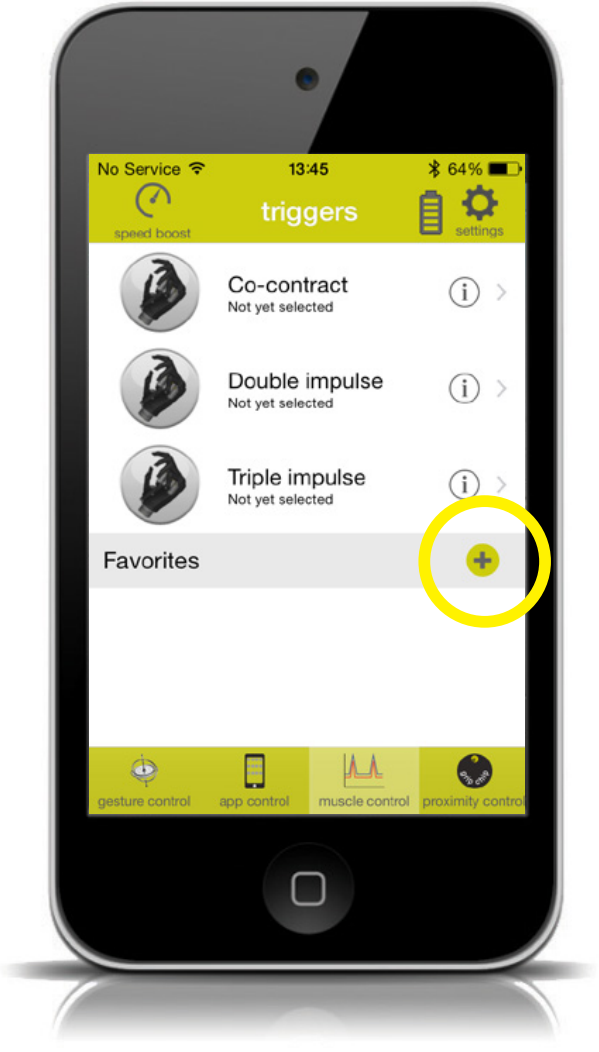
Tapping on the “muscle control” icon bring you to the below screen that will allow you to edit a favorite or tap the “send” button to send to the hand.



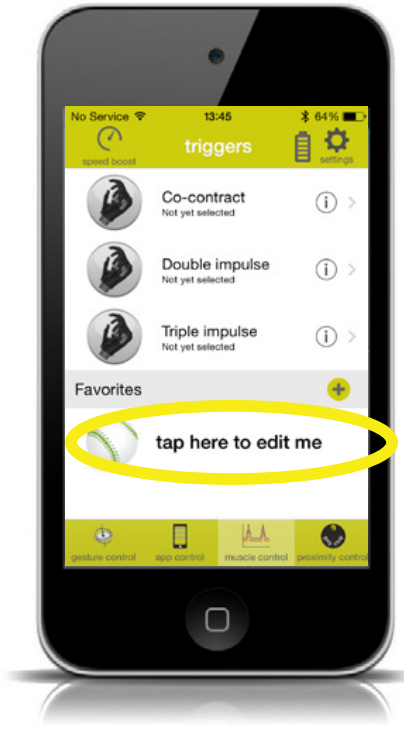
Note: If you have questions about how a particular grip pattern or trigger works, refer to your user manual or contact your prosthetist.

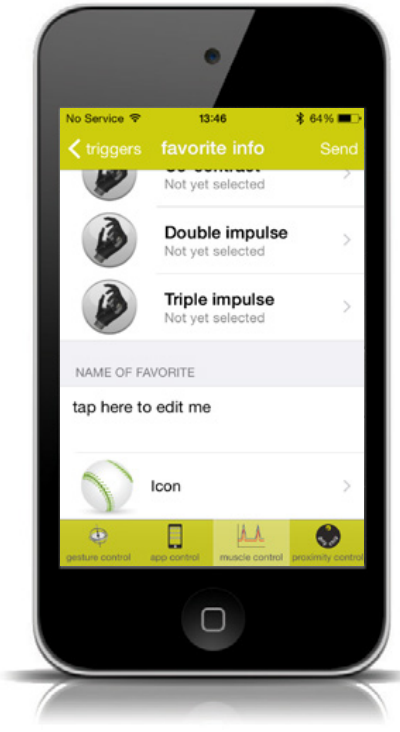
Creating a new favorite

Here, you will be able to create your own set of features and triggers that you prefer to use for different tasks. To set up a group of features as a favorite, tap the + icon on the favorites bar.



Next, to edit the new favourite, simply tap “tap here to edit me”

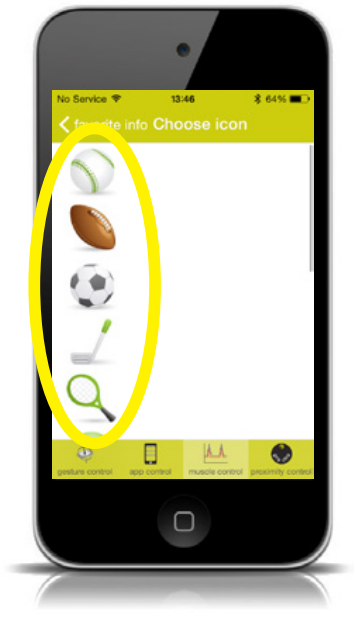


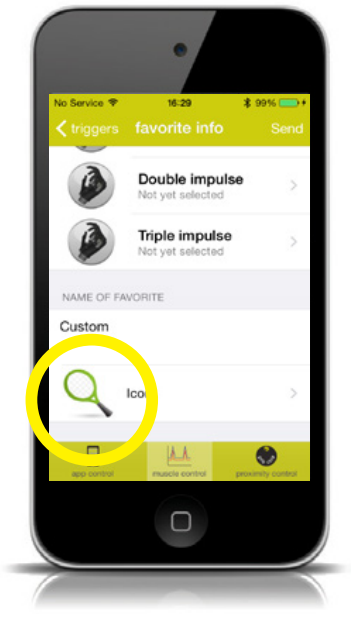


Here, the name, icon and grip for each trigger can be edited.

By tapping the icon a list of icon options will appear.

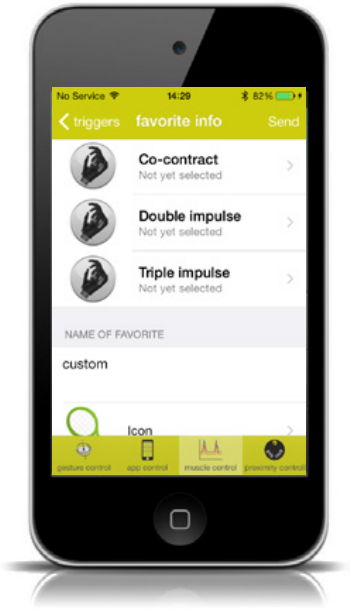
Tap one to select





Your chosen icon will now appear and the name of the Favorite can be changed

Different grips can be assigned to your new favorite by tapping on any of the available triggers.



After tapping a trigger, you can select a grip from the 24 quick grips or 12 mygrips

Your new favorite will now be added to your list in the “muscle control” screen of the my i-limb app and can be activated in the future by tapping on it and then tapping the send button.

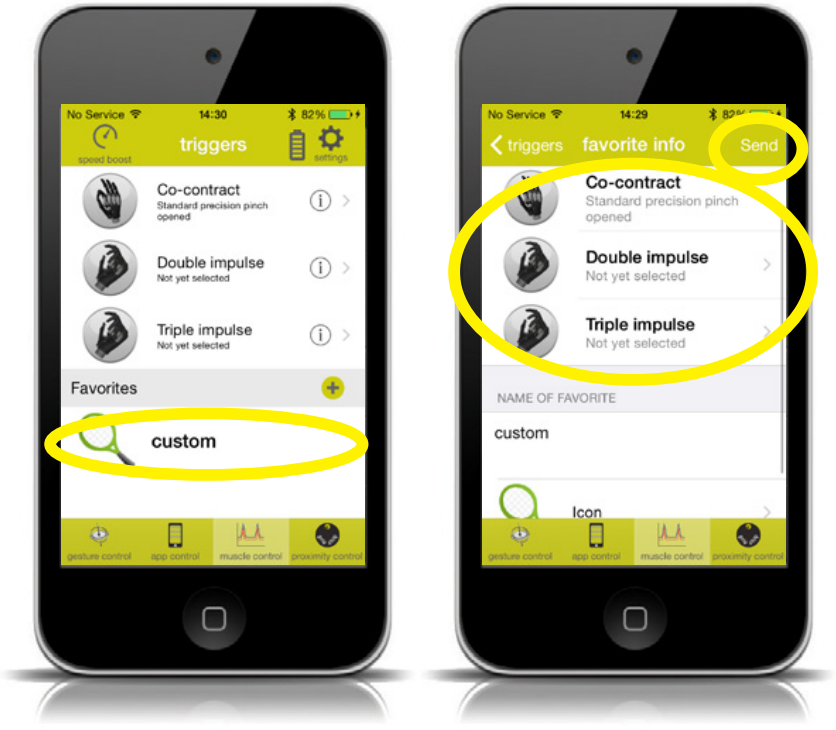
The next section will discuss how to send your favorite to your i-limb quantum.

Activating a favorite

Tap on a favorite from the muscle control screen. Your chosen grips will now appear in the favourite info.

Tap “send” at the top right hand corner to send the favorite to the hand.

Note: Any changes are automatically saved.



Modifying existing favorites

To delete a favorite, press/hold and slide it to the left and select the delete option.

To edit the favorite, simply tap on it and you will be brought back to the information screen where anything can be changed in the same manner that you have originally configured.

After making the desired changes, tap the top left “triggers” button to return to the “muscle control” screen and the changes to the favorite will automatically be saved for future use.

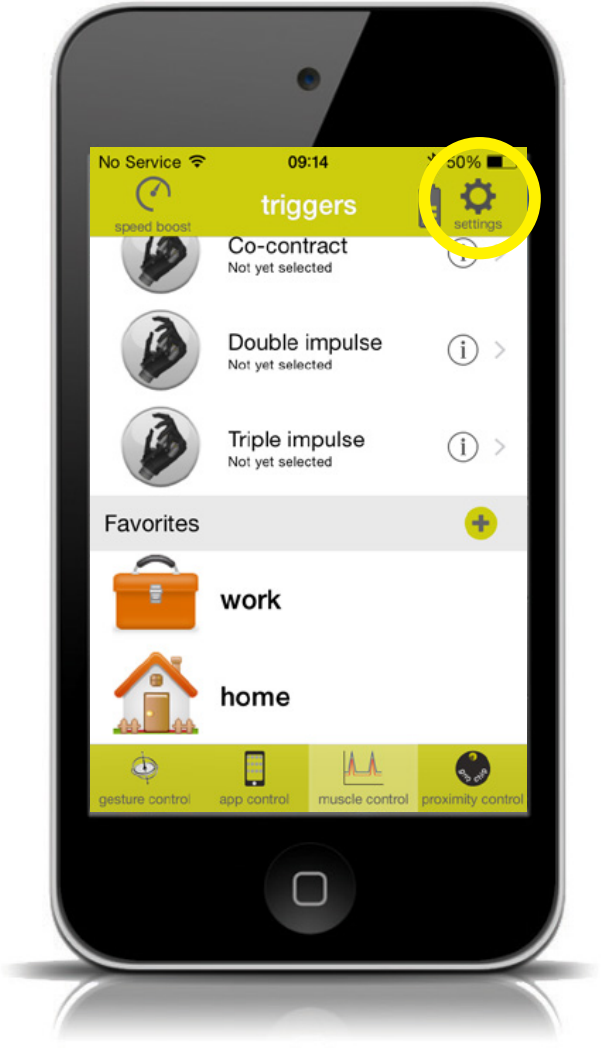
Real time graph

Selecting the “myo-graph“ option from the top menu brings up a graph showing your muscle signals on the screen. This visual information can be helpful when trying to activate certain triggers or work on controlling activation and relaxation of signals.

Turn the Apple device horizontally to view the graph. To exit the graph, simply turn the Apple device back to a vertical position or tap the “Done“ button in the upper left hand corner.

Settings

To access the “Settings“ page, tap the gear on the top right of the screen.

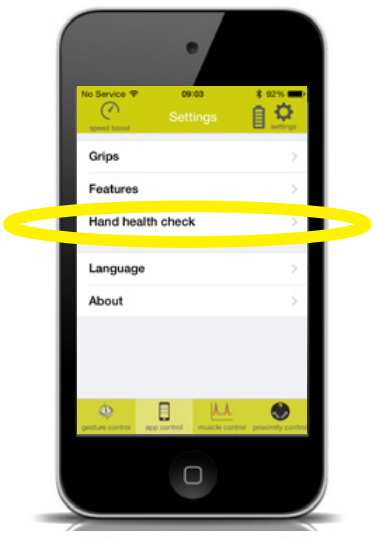


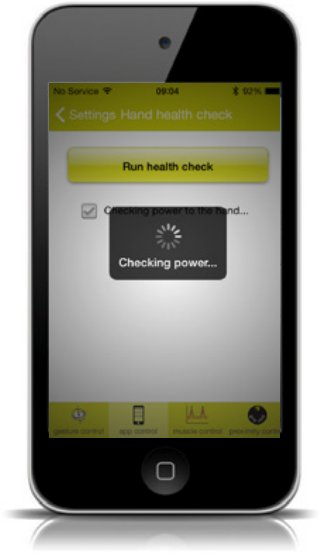
Other features

To access more features, back on the “Settings“ page, you can also select “Features” which will provide a new screen showing the additional options that can be turned “On or Off.”

Hand health check

Selecting “Hand health check” from the “Settings“ menu brings up the option to run a test on your device to ensure that everything is running as it should. Tapping “Run health check” will run through a series of checks and will alert Touch Bionics to contact your prosthetist if anything requires attention.



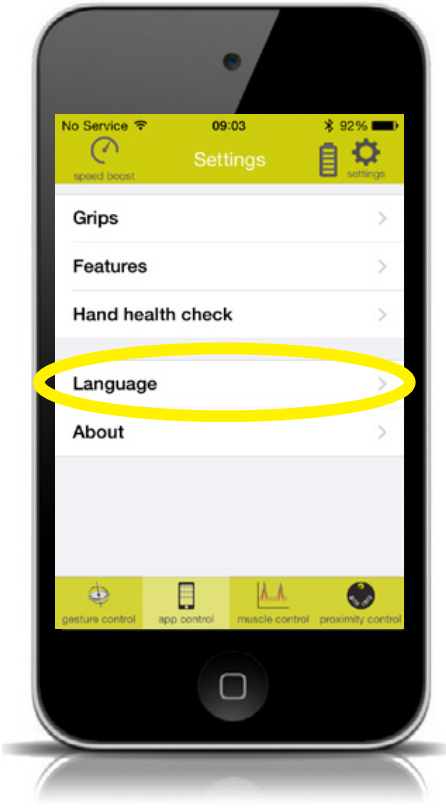


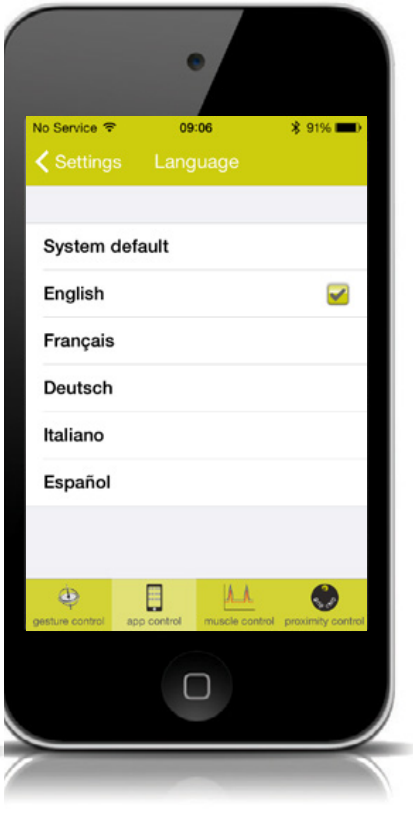
Settings Hand health check
Run health check
Checking power to the hand... Passed
Checking battery life... Passed
Checking digit function... Passed

Note: You must be connected to the Internet using Wi-Fi to run a Hand health check.

Languages

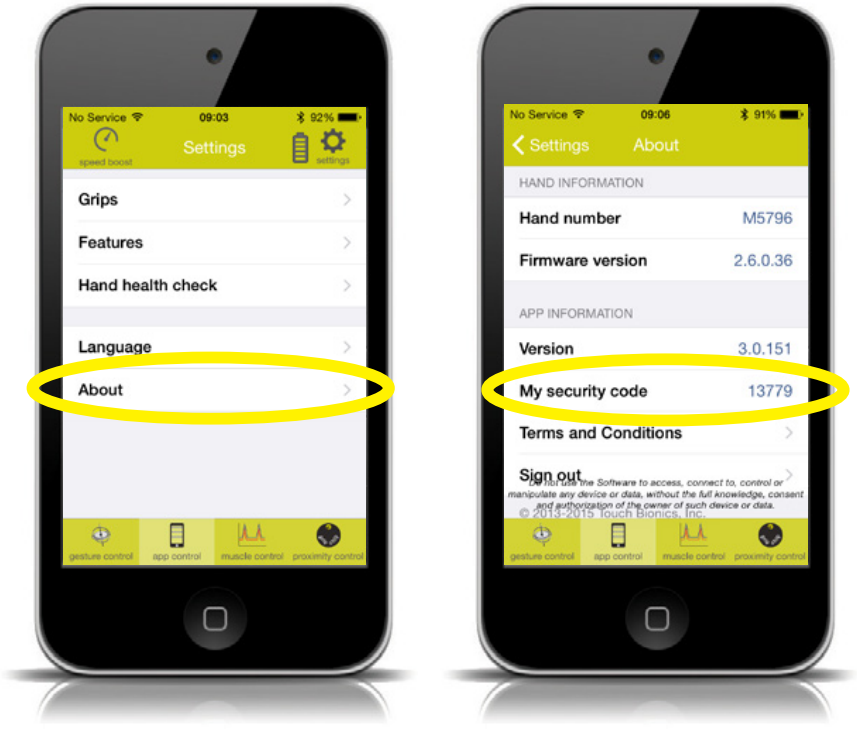
The default language setting is English. Select “Language” to change the settings to another language.





About

The final option on the “Settings“ menu is the “About” option. Tapping this brings up a screen displaying information about your prosthesis and the application. Your unique security code will also be found here.



Tapping “Sign out“ will end the app and require you to sign in again for your next session.

Health and safety

For health and safety information regarding the i-limb quantum, please refer to the i-limb quantum user manual that can be found at www.touchbionics.com/downloads/document-library/.

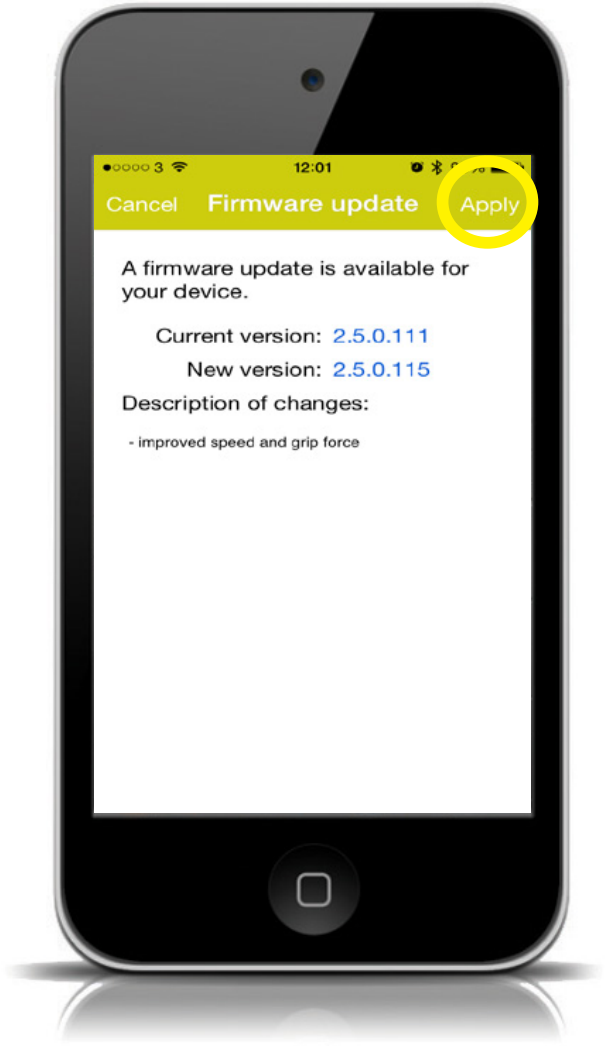
For health and safety information regarding your Apple device, please refer to the product literature from Apple.

Other important points

- Updates will be available through the App Store. Check back regularly to ensure you are using the latest version of the my i-limb mobile app.

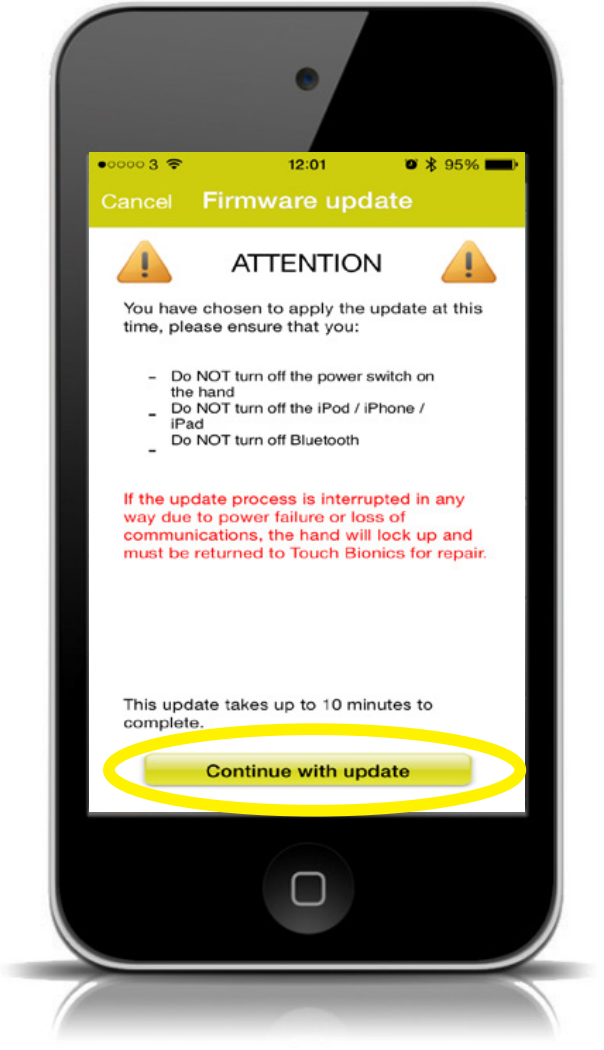
Firmware Update

Touch Bionics always recommends that you download the latest firmware for your device. If a firmware update is available, you will be prompted with the following screen upon connection to your hand with the my i-limb app.



Tap “Apply“ to initiate the update. Tapping “Cancel“ will dismiss this screen and return you to the Quick grip landing screen.

Tapping “Apply“ will bring you to the app update warning screen. Ensure that you read and comply with all warnings. Tap “Continue with update” to proceed.


12:01
95%
Cancel
Firmware update
ATTENTION
You have chosen to apply the update at this time, please ensure that you:
- Do NOT turn off the power switch on the hand
- Do NOT turn off the iPod / iPhone / iPad
- Do NOT turn off Bluetooth
If the update process is interrupted in any way due to power failure or loss of communications, the hand will lock up and must be returned to Touch Bionics for repair.
This update takes up to 10 minutes to complete.
Continue with update

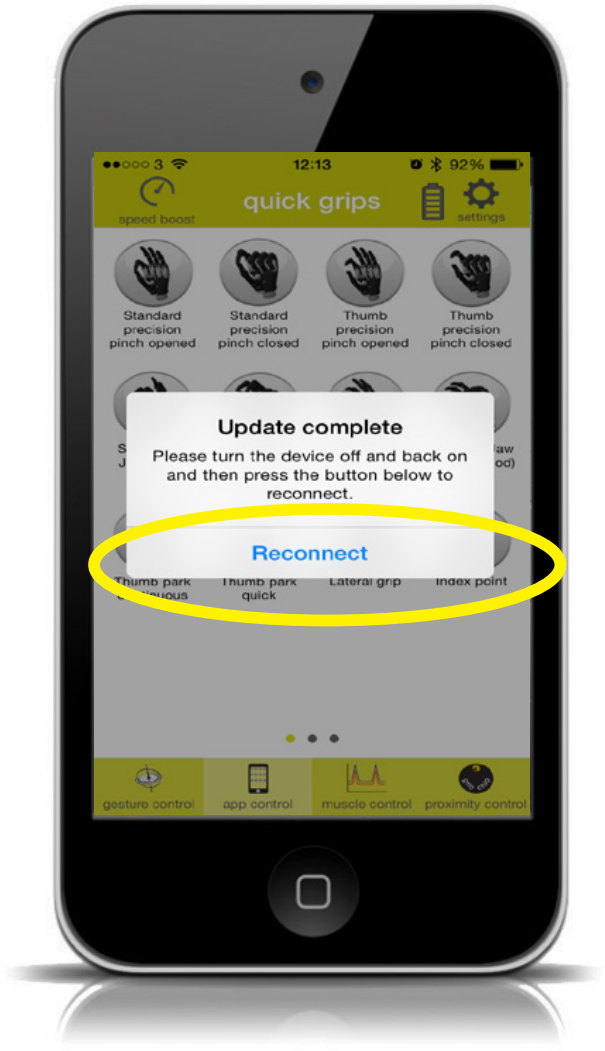
Note: Ensure that you are able to perform the update without interruption. Loss of power or hand communication could result in your device locking, which will require service by Touch Bionics. Total update time may take up to 10 minutes.

After tapping “Continue with update” you will arrive at a final confirmation screen. Tap “yes” to continue.

12:01
95%
Cancel
Firmware update
ATTENTION
You have chosen to apply the update at this time, please ensure that you:
Confirmation
Please do NOT turn the device off or move the device during the update.
Are you sure you want to apply the firmware update to this device?
No
Yes
This update takes up to 10 minutes to complete.
Continue with update

After tapping “yes” the update will begin. You will see a variety of screens as the update progresses.

At the conclusion of the update you will be prompted to turn your device off and back on again to complete the update.



After powering off and on, tap “Reconnect” to continue working with the my i-limb app.

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Part number: MA 01335, Issue No. 1, August 2015